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ABSTRACT

An airflow sensor system for monitoring air inlet airflow and air outlet airflow of a vacuum cleaner is provided according to an embodiment of the invention. The airflow sensor system includes a vacuum cleaner air duct, a bypass tube connected to the air duct, and an airflow sensor positioned at least partially in the bypass tube. The airflow sensor is configured to generate a normal voltage differential range when the bypass tube airflow is within a predetermined normal airflow range, configured to generate an input blockage voltage differential range when the bypass tube airflow is greater than the predetermined normal airflow range, and further configured to generate an output blockage voltage differential range when the bypass tube airflow is less than the predetermined normal airflow range.